I S-13 The Changes of Serum Prostatic Tumor Marker Levels in Acute Prostatitis

Hiroyasu Yoshikawa, Nobukatsu Fujii, Ryuta Goto, Michiya Ota, Takao Ikeuchi and Yoshio Kai

Department of Urology, Showa University Fujigaoka Hospital

Prostatic tumor marker is useful for the diagnosis and following-up of prostatic cancer. It is often seen that the serum prostatic tumor marker levels are increased in acute prostatitis patients.

We evaluated the serum prostatic tumor marker (γ -Sm, PSA, PAP) in patients with acute prostatitis.

(Material and Methods) 23 cases of acute prostatitis were evaluated.

Serum γ -Sm, PSA, PAP and CRP levels were measured before treatment with antibiotics and 3 days, 1 week and 2 weeks thereafter.

(Result) In the acute phase of inflammation (before treatment) serum γ -Sm increased in 14.3% of the mild group (CRP < 5.0 mg/dl) and all cases of the severe group (CRP $\geq$ 5.0 mg/dl). Then it decreased and was within the normal range 1 week later. Serum PSA increased in 57.1% of the mild group and all cases of the severe group as same as γ -Sm. It decreased and was within the normal range 2 weeks later.

The decrease of serum γ -Sm is earlier than that of PSA. However, PAP does not increase in any phase of inflammation.

(Conclusion) It suggest that the prostatic tumor marker should be measured after treatment more than 2 weeks in acute prostatitis patients and PAP is most reliable marker in this phase.

I S-14 PERIPHERAL BLOOD STEM CELL AUTOTRANS-PLANTATION(PBSCT) FOR UROLOGICAL CANCER

Noriharu Mikata

Department Urology, Tokyo Metropolitan Bokutoh Hospital

Among the side effects of cancer chemotherapy, the most serious one is myelosuppression. To cope with this problem, peripheral blood stem cell autotransplantation(PBSCT) has been used recently. Since 1994, PBSCT has been performed at this clinic in combination with chemotherapy for urological cancer if myelosuppression is expected or occurred.

PBSCT was done in 20 patients. The primary lesion were urothelial cancer in 7 patients, the germ cell tumor in 12 patients and a nephroblastoma. Chemotherapy regimens for primary cancer include VAB-III, MVAC, and others.

PBSCT was easy to perform, safe, and effective in restoring the bone marrow which had been suppressed by chemotherapy for urological cancer.

I S-15 Surgical Treatment of the Patients with Anejaculatory Male Infertility

Han-Sun Chiang
Department of Urology
Taipei Medical College Hospital
Taipei, Taiwan

Anejaculation had been a problem of male infertility. Electrojaculation could successfully get sperm in antegrade and or retrograde ejaculation in our experience of 45 patients with spinal cord injury and psychogenic anejaculation. However, generalized poor quality of the sperm and variable result in the assisted reproductive technique.

No scalpel vasectomy became a routine procedure in our practice. We thought that this technique could apply for vasal sperm aspiration. Recently, we experienced 3 cases of anejaculation scheduled for Intracytoplasmic Sperm Injection (ICSI). No-scalpel vasal sperm aspiration was performed as the following procedures:

1. Under local anesthesia, grasped the vas deferens near the epididymal tail, pulled it out of the scrotum using no-scalpel technique.
2. Open a tiny wound of the vas deferens with microsurgical scissors. Insert a finest i.v. catheter proximally into the lumen of vas deferens.
3. Irrigate the vas deferens with few drops of Human Tubal Fluid and collect the oozing out vasal fluid.
4. Repeat the procedure and send the vasal fluid to the laboratory for sperm retrieval.

The first case got 6.4×10^6 /c.c motile sperm, 75% fertilization rate in ICSI procedure. The second case got 8×10^6 /c.c motile sperm, 100% fertilization rate in conventional IVF procedure. The third case got 12×10^6 /c.c motile sperm, 83% fertilization rate in ICSI procedure. All of their wives had been pregnant. No remarkable sequela was noted in these 3 patients.

We believe the no-scalpel vasal aspiration will be a good alternative to treat the anejaculatory male infertility.

I S-16 Imprint Cytology of Testis Biopsy as a Qualitative and Quantitative Method for Evaluation of Spermatogenesis

Dai-Lung Char, Guang-Huan Sun, Nieh Hsien*, Sun-Yuan Chang, Cheng-Ping Ma, Dah-Shyong Yu
Division of Urology, Departments of Surgery and Pathology, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan

Biopsy of the testis is a diagnostic test used in the evaluation of infertile patients with azoospermia and, in certain instances, severe oligospermia. Many methods were applied to serve as adjunctive diagnostic tools for conventional biopsy, including percutaneous aspiration, deoxyribonucleic acid (DNA) flow cytometry and touch imprint cytology. The imprint cytology is a rapid, easy, reliable adjunctive method for pathological evaluation. The aim of this study is to investigate whether imprint cytology could be a qualitative and quantitative parameter for evaluation of spermatogenesis. Twenty azoospermic and 40 normozoospermic patients, age ranged from 19 to 41, were undergone testis biopsy and touch preparation. The imprinted slide was stained with Diff-Quik Method and the result could be read within five minutes. Each imprint was randomly counted five high power fields at 400X magnification with various spermatogenic cells to classify at the different stages of spermatogenesis and compared with DNA flow cytometry and permanent pathology. The results showed imprint cytologic analysis with highly statistical reproducibility and permitted identification of different situations associated with azoospermia. And it also had high correlation with DNA flow cytometry and permanent pathology. In conclusion, imprint cytology, indeed, could be a qualitative and quantitative parameter for evaluation of spermatogenesis.